

# 15.—The common 'colonial' spider *Ixeuticus candidus* (Koch) and its synonyms (Dictynidae: Araneae)

by Barbara York Main \*

Manuscript received 17 August, 1971; accepted 15 November, 1971

## Abstract

The synonyms of the widespread Australian dictynid spider *Ixeuticus candidus* (Koch) are discussed. The nest and web are described and the species is distinguished from *Ixeuticus martius* (Simon).

## Introduction

The small dictynid spider, *Ixeuticus candidus* (Koch) (fig. 1) is widespread throughout Australia and has aroused interest because of its alleged 'colonialism', a habit rare amongst spiders.

## Taxonomy

*Ixeuticus candidus* (Koch 1872).

*Amaurobius candidus* Koch, 1872, pp. 333-334, pl. 26 fig. 6.

*Ixeuticus candidus* Roewer, 1954, p. 1368.

*Phryganoporus candidus* Lehtinen, 1967, p. 259.

## Notes on synonyms

Simon (1908) erected the genus *Phryganoporus* to contain his earlier described species *Amaurobius gausapata* (Simon 1906) and the two new species *P. tubicola* and *nigrinus*. He recorded that the spiders were gregarious or social. I consider these three forms of Simon's are the one species, and synonymous with *Ixeuticus candidus* (Koch 1872). This species was described by Koch under the name *Amaurobius candidus* (Koch 1872). The type came from Bowen, Queensland. Roewer (1954) transferred the species to *Ixeuticus* to which genus it has since generally been referred.

Lehtinen (1967) sank the genus *Ixeuticus* in *Badumna* but transferred *candidus* to *Phryganoporus* and synonymised *P. gausapata* with it, thus erecting the new combination: *Phryganoporus candidus* (Koch 1872). However Leech (1971) retained *Ixeuticus* and discussed *I. candidus* but did not consider the status of *Phryganoporus*. One feature formerly regarded as distinguishing *Phryganoporus* from *Ixeuticus* was the undivided cribellum of *Phryganoporus* (Simon 1908 and Main 1964, 1967). Recent more detailed examination of specimens has subsequently shown the cribellum to have a faint dividing line (fig. 2) (specimens in author's collection). Thus this feature can no longer be considered a generic character.

The present author regards *Amaurobius candidus* Koch [= *Ixeuticus candidus* (Koch)] and *Phryganoporus gausapata* (Simon) as synonyms but retains the genus *Ixeuticus* into which

the species is placed. *Phryganoporus tubicola* Simon and *P. nigrinus* Simon are here also synonymised with *Ixeuticus candidus* (Koch).

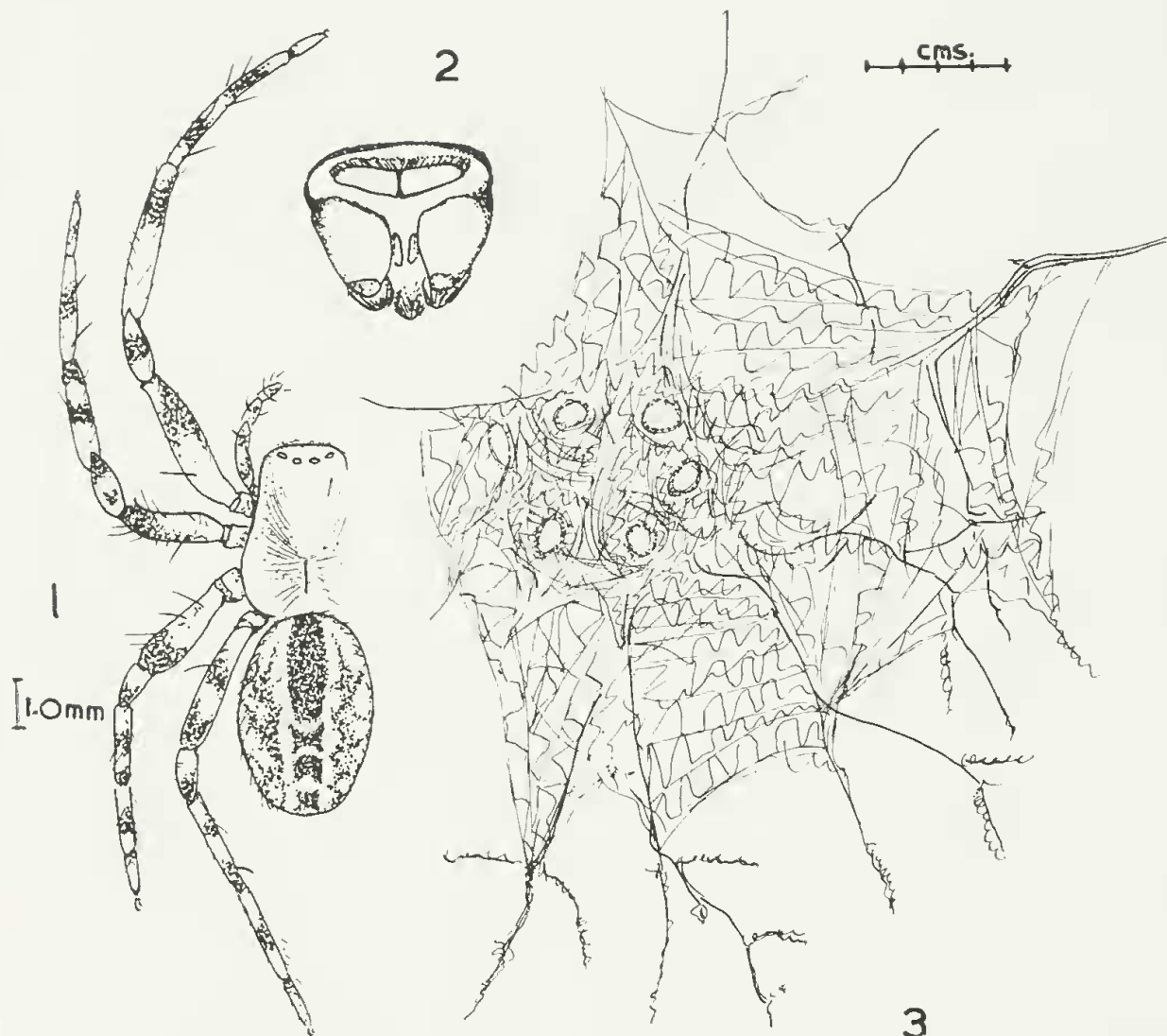
## Natural History

Amongst the few records of 'socialism' or web colonies of spiders, the example of *Ixeuticus candidus* has been included, both under this name (McKeown, 1963) and that of *Phryganoporus gausapata* (Simon 1908, Dalmás 1917 and Main 1964, 1967). However from the author's observations it appears that the spiders are gregarious only during the juvenile stages. The nests are made in foliage. Typically, a solitary nest consists of a tough silk tube up to about two inches long, from the mouth of which extends a lacc-like snare web. The spider mates in the summer, and eggs are found in the retreat tube in early autumn. Through the winter and spring the young spiderlings construct their own individual snares and tiny retreats around the parent tube until the whole aggregate takes on the appearance of a 'colony' (fig. 3). Later, individual nests are made. However it is not known whether sibling matings take place in the brood colonies or whether mating occurs more randomly after the spiders have dispersed. In any case the gregariousness has not been observed amongst adults.

## Discussion on the Distribution of *Ixeuticus candidus* and its Relationship to *Ixeuticus martius*

Dondale (1966) and Leech (1971) emphasise the similarity of *I. candidus* to *I. martius* (Simon) and the latter author even considered the possibility of synonymy. However there are marked differences between the two species. The abdominal pattern of an anterior dorsal median stripe followed by several distinct chevrons (sometimes reduced to a series of spots) and the distinct leg annulations (fig. 1) distinguish *I. candidus* from the less conspicuously marked and generally larger *I. martius*. *I. martius* builds a simple d'oyley-like lace web with short retreat funnel on vegetation, buildings, walls and fences, especially on timber structures (author's observations). *I. candidus* builds a silk tube from which a small silk snare radiates. Hickman (1967) notes these web differences and mentions the "cocoon" like nest of *I. candidus*. He also gives clear diagnostic photographs of spiders of the two species (1967). Main (1964, 1967) figured the spider and a solitary and 'colonial' nest under the name *Phryganoporus*.

\* Zoology Department, University of Western Australia, Nedlands, Western Australia 6009.



Figures 1-3.—*Ixauticus candidus* (Koch). 1, adult female spider. 2, spinnerets and cribellum. 3, 'colonial' web and retreat tubes of juvenile spiders.

*I. martius* occurs in New Zealand, eastern Australia and Tasmania. It has also been recorded as an introduction in California; first by Gertsch (1937) who described it under the name of *Hesperauximus sternitzkii*. Marples (1959) subsequently noted the synonymy. Leech (1971) again noted the Californian occurrence and listed localities where it occurs. *I. martius* has not been recorded from Western Australia.

*I. candidus* occurs in eastern Australia and Tasmania and is common in south-western Australia where it has formerly been identified as *Phryganoporus* (Simon 1908 and Main 1964, 1967).

#### References

- Dalmas, C. de (1917).—Araignées de Nouvelle-Zélande. *Ann. Soc. Ent. France* 86: 317-430.
- Dondale, C. D. (1966).—The spider fauna (Araneida) of deciduous orchards in the Australian Capital Territory. *Aust. J. Zool.* 14: 1157-92.
- Gertsch, W. J. (1937).—New American Spiders. *Amer. Mus. Nov.* 936: 1-7.
- Hickman V. V. (1967).—Some Common Spiders of Tasmania. (Tasmanian Museum and Art Gallery, Hobart).
- Koch, L. (1872).—Die Arachnidan Australiens. Nuremberg.
- Leech, R. (1971).—The Introduced Amaurobiidae of North America, and *Callobius hokkaido* n.sp. from Japan (Arachnida: Araneida). *Canad. Ent.* 103: 23-32.
- Lehtinen, P. T. (1967).—Classification of the Cribellate Spiders and some Allied Families, with Notes on the Evolution of the Sub-order Araneomorphae. *Ann. Zool. Fenn.* 4: 199-468.
- McKeown, K. (1963).—Australian Spiders. (Angus and Robertson).
- Main, B. Y. (1964) and (1967).—Spiders of Australia. (Jacaranda).
- Marples, R. R. (1959).—The Dictynid Spiders of New Zealand. *Trans. Roy. Soc. N.Z.* 87: 333-6.
- Roewer, O. Fr. (1942-54).—Katalog der Araneae. (Bremen).
- Simon, E. (1906).—Etude sur les Araignées de la section des Cribellates. *Ann. Soc. Ent. Belg.* 50: 284-308.
- Simon, E. (1908).—Die Fauna Sudwest Australiens (ed. Michaelson & Hartmeyer). 1 (12): 359-446.



## Membership of the Society, October, 1971

### Honorary Members

- Herbert, Prof. D. A. 47 Adamson Street, Woolloowin, Q. 4030 (1918, 1964)  
 Jenkins, Mrs. C. F. H. 15 Labouchere Road, South Perth 6151 (1933, 1965)  
 Johnson, Mrs. E. R. L. c/o National Bank, 26 King William Street, Adelaide, S.A. 5000 (1921, 1966)  
 Shearer, Mr. J. 89 Thomas Street, Nedlands 6009 (1937, 1964)  
 Shedley, Mr. A. C. 27 Birdwood Avenue, Como 6152 (1941, 1965)  
 Teakle, Prof. L. J. H. 51 Coldiaslie Road, Indooroopilly, Q. 4068 (1928, 1971)

### Honorary Associate Members

- Rowledge, Mr. H. P. 52 Labouchere Road, South Perth 6151 (1933, 1964)  
 Shelton, Miss K. M. Flat H8, Hollywood Village, Williams Road, Nedlands 6009 (1914, 1965)

### Members

- Ahmat, Mr. A. L. 24 Armagh Street, Victoria Park 6100 (1971)  
 Allender, Mr. B. M. Botany Department, University of Hawaii, Hawaii, U.S.A. 96822 (1970)  
 Aplin, Mr. T. E. H. Western Australian Herbarium, Department of Agriculture, Jarrah Road, South Perth 6151 (1956)  
 Archer, Mr. M. Western Australian Museum, Beaufort Street, Perth 6000 (1968)  
 Arriens, Mr. P. A. Department of Geophysics, Australian National University, P.O. Box 4, Canberra, A.C.T. 2601 (1958)  
 Atkinson, Mr. P. R. 74 Watkins Road, Claremont 6010 (1970)  
 Baird, Miss A. M. Botany Department, University of Western Australia, Nedlands 6009 (1928)  
 Baker, Mr. G. F. U. 44 Gillark Street, Mandurah 6210 (1952)  
 Balme, Dr. B. E. Geology Department, University of Western Australia, Nedlands 6009 (1958)  
 Bannister, Mr. J. L. 7 Mann Street, Cottesloe 6011 (1967)  
 Baynes, Mr. A. Zoology Department, University of Western Australia, Nedlands 6009 (1967)  
 Beck, Dr. A. B. Department of Agriculture, Jarrah Road, South Perth 6151 (1962)  
 Beech, Dr. E. R. 254 St. George's Terrace, Perth 6000 (1949)  
 Beggs, Mr. B. J. 24 Elizabeth Street, Cottesloe 6011 (1971)  
 Bennett, Mrs. J. Western Australian Herbarium, Department of Agriculture, Jarrah Road, South Perth 6151 (1962)  
 Berndt, Prof. R. M. Anthropology Department, University of Western Australian, Nedlands 6009 (1956)  
 Binns, Dr. R. A. Geology Department, University of Western Australia, Nedlands 6009 (1971)  
 Bottomley, Dr. G. A. Chemistry Department, University of Western Australia, Nedlands 6009 (1971)  
 Bowen, Mr. B. K. Department of Fisheries and Fauna, 108 Adelaide Terrace, Perth 6000 (1958)  
 Boyd, Dr. W. J. R. Institute of Agriculture, University of Western Australia, Nedlands 6009 (1968)  
 Boyer, Mr. D. D. Lot 52, Ashby Terrace, Middle Swan 6056 (1970)  
 Bradshaw, Dr. S. D. Zoology Department, University of Western Australia, Nedlands 6009 (1965)  
 Bridge, Mr. P. J. 248 Rutland Avenue, Carlisle 6101 (1966)  
 Brittan, Dr. N. H. Botany Department, University of Western Australia, Nedlands 6009 (1951)  
 Brockway, Mr. G. E. 44 McDonald Street, Como 6152 (1961)  
 Brooker, Mr. M. I. H. Forest Research Institute, Forestry and Timber Bureau, Banks Street, Yarralumla, A.C.T. 2600 (1969)  
 Broughton, Mrs. H. C. 9 Chester Street, Subiaco 6008 (1970)  
 Brown, Dr. G. D. C.S.I.R.O. Division of Animal Physiology, P.O. Box 144, Parramatta, N.S.W. 2150 (1959)  
 Burbidge, Dr. N. T. C.S.I.R.O. Division of Plant Industry, P.O. Box 109, Canberra 2601 (1935)  
 Burns, Mr. D. Government Chemical Laboratories, Adelaide Terrace, Perth 6000 (1947)  
 Burvill, Mr. G. H. 31 Aldmondbury Road, Ardross 6153 (1929)  
 Butler, Mr. R. J. T. Martalup House, 254 St. George's Terrace, Perth 6000 (1965)  
 Carey, Prof. S. W. Geology Department, University of Tasmania, Hobart, Tas. 7000 (1953) (Corresponding member)  
 Chittleborough, Dr. R. G. C.S.I.R.O. Regional Laboratories, Underwood Avenue, Floreat Park 6014 (1964)  
 Churchill, Dr. D. M. Botany Department, Monash University, Clayton, Vic. 3168 (1956)  
 Clark, Mr. J. M. 67 Joel Terrace, Perth 6000 (1967)  
 Cleave, Mr. T. P. 21 Salvado Road, Cottesloe 6012 (1962)  
 Cleverly, Mr. W. H. 79 Ward Street, Kalgoorlie 6430 (1927)  
 Cole, Dr. W. F. C.S.I.R.O. Division of Building Research, Graham Road, Highett, Vic. 3190 (1939)  
 Coleman, Dr. P. J. Geology Department, University of Western Australia, Nedlands 6009 (1963)  
 Coleman, Mr. R. S. 232 Ewan Street, Doubleview 6018 (1954)  
 Coley, Mr. H. 44 Centenary Flats, Rowethorpe, Bentley 6102 (1940)  
 Collin, Dr. R. Physiology Department, University of Western Australia, Nedlands 6009 (1957)  
 Ccsgriff, Dr. J. W. 2143 Dorchester North, Troy, Michigan, U.S.A. (1965)

- Crawford, Dr. I. M. Western Australian Museum, Beaufort Street, Perth 6000 (1961)
- Curnow, Prof. D. H. 69 Kingsway, Nedlands 6009 (1956)
- Curry, Mr. S. J. Department of Agriculture, Jarrah Road, South Perth 6151 (1966)
- Daniell, Mrs. T. D. "Marri", 2 Samson Street, Esperance 6450 (1967)
- Davis, Mr. C. E. S. C.S.I.R.O. Secondary Industries Laboratory, Underwood Avenue, Floreat Park, 6014 (1940)
- Davy, Dr. R. Australian Mineral Development Laboratories, Conyngham Street, Frewville, S.A. 5063 (1966)
- De Graaf, Mr. M. Hale School, Wembley Downs 6019 (1970)
- De la Hunt, Mr. L. E. 22 Fraser Road, Applecross 6153 (1967)
- Dix, Mr. W. C. 28 Kinninmont Avenue, Nedlands 6009 (1970)
- Dortch, Mr. C. E. 132 Wellington Street, Mosman Park 6012 (1971)
- Douglas, Mr. A. M. Western Australian Museum, Beaufort Street, Perth 6000 (1965)
- Drover, Prof. D. P. Chemistry Department, University of Papua and New Guinea, P.O. Box 1144, Boroko, Territory of Papua and New Guinea (1949)
- Doyle, Mr. H. A. Geology Department, University of Western Australia, Nedlands 6009 (1971)
- Eastman, Mr. W. H. Forests Department, R. & I. Bank Building, Barrack Street, Perth 6000 (1963)
- Edgell, Prof. H. S. Department of Geology, College of Arts and Sciences, Pahlavi University, Shiraz, Iran (1962)
- Elkington, Mr. C. R. 25 Dyson Street, Halsey 6151 (1958)
- Everingham, Mr. I. B. Lawes Road, P.O. Box 323, Port Moresby, Territory of Papua and New Guinea (1961)
- Fairbridge, Prof. R. W. Geology Department, Columbia University, New York 27, New York, U.S.A. (1946)
- Finch, Mrs. M. E. Zoology Department, University of Western Australia, Nedlands 6009 (1950)
- Ford, Mr. J. 7 Pinner Place, Lynwood 6155 (1957)
- Forman, Mr. F. G. 14 Hobbs Avenue, Nedlands 6009 (1927)
- Fraser, Mr. A. J. 15 Campsie Street, Shenton Park 6008 (1940)
- Freedman, Dr. L. Department of Anatomy, University of Western Australia, Nedlands 6009 (1970)
- Galbraith, Mr. A. R. 117 Rossall Street, Christchurch N.W.1, New Zealand (1919) (Corresponding member)
- Garratt, Mr. E. J. 255 Vincent Street, Leederville 6007 (1957)
- Geary, Mr. J. K. 53 Arterial Road, St. Ives, N.S.W. 2075 (1949)
- Geidans, Mr. L. 1 Lisle Street, Mount Claremont 6010 (1962)
- George, Mr. A. S. Western Australian Herbarium, Department of Agriculture, Jarrah Road, South Perth 6151 (1961)
- George, Dr. R. W. Western Australian Museum, Beaufort Street, Perth 6000 (1958)
- Gladstones, Dr. J. S. Department of Agriculture, Jarrah Road, South Perth 6151 (1957)
- Glenister, Dr. B. F. Geology Department, State University of Iowa, Iowa City, Iowa, U.S.A. (1954)
- Gloe, Mr. C. S. 23 Kirkwood Street, Beaumaris, Vic. 3193 (1939)
- Glover, Dr. J. J. E. Geology Department, University of Western Australia, Nedlands 6009 (1956)
- Goss, Miss O. M. Department of Agriculture, Jarrah Road, South Perth 6151 (1934)
- Gray, Mr. D. D. 2 Hill Terrace, Mosman Park 6012 (1956)
- Gray, Mr. N. M. 1 Centenary Avenue, Hunter's Hill, N.S.W. 2110 (1948)
- Gregson, Mr. P. J. Geophysical Observatory, Mundaring 6073 (1962)
- Grieve, Prof. B. J. Botany Department, University of Western Australia, Nedlands 6009 (1948)
- Groves, Dr. D. I. Lot 60, Talma Place, Gwelup 6021 (1971)
- Hall, Mr. H. I. E. Swiss Aluminium Mining Aust. Pty. Ltd., 10 Stirling Highway, Nedlands 6009 (1951)
- Hallam, Mrs. S. F. Department of Anthropology, University of Western Australia, Nedlands 6009 (1967)
- Hallberg, Mr. J. A. 18a Buntine Road, Wembley Downs 6019 (1970)
- Harding, Mr. J. H. Woods and Forests Department, Gawler Place, Adelaide. S.A. 5000 (1952)
- Hare, Mr. R. R. Hare and Associates, 20 Little Collins Street, Melbourne, Vic. 3000 (1950)
- Hassell, Dr. C. W. 39 Birdwood Parade, Dalkeith 6009 (1962)
- Hatch, Mr. A. B. Forests Department, R. & I. Bank Building, Barrack Street, Perth 6000 (1958)
- Hellmuth, Dr. E. O. Lot 2, North Beach Road, Balcatta 6021 (1967)
- Hilton, Mr. R. N. Botany Department, University of Western Australia, Nedlands 6009 (1966)
- Hodgkin, Dr. E. P. Zoology Department, University of Western Australia, Nedlands 6009 (1946)
- Hodgson, Dr. E. A. B.H.P. Oil and Gas, 459 Little Collins Street, Melbourne, Vic. 3000 (1962)
- Hodgson, Mr. E. C. 176 Daglish Street, Wembley 6014 (1946)
- Holland, Dr. A. A. Botany Department, Monash University, Clayton, Vic. 3168 (1950)
- Hollis, Mr. L. J. Department of Commerce, University of Western Australia, Nedlands 6009 (1959)
- Hope, Mrs. J. Department of Prehistory, Australian National University, P.O. Box 4, Canberra A.C.T. 2601 (1965)



- Hopkins, Dr. E. R. Forests Department, R. & I. Bank Building, Barrack Street, Perth 6000 (1959)
- Horwitz, Dr. R. C., W. Johnson & Associates, 196 Adelaide Terrace, Perth 6000 (1963)
- Hough, Miss G. Botany Department, University of Western Australia, Nedlands 6009 (1971)
- Howden, Mr. P. R. c/o Bank of New South Wales, 109 St. George's Terrace, Perth 6000 (1963)
- Huxley, Mr. W. J. 16 Matheson Road, Applecross 6153 (1952)
- Ingram, Mr. B. S. 19 Remington Street, Dianella 6062 (1966)
- James, Mr. H. N. 31 Birdwood Parade, Dalkeith 6009 (1935)
- James, Dr. S. H. Botany Department, University of Western Australia, Nedlands 6009 (1962)
- Jenkins, Mr. C. F. H. Department of Agriculture, Jarrah Road, South Perth 6151 (1929)
- Jeppe, Dr. J. F. B. 2 Graham Street, Dunedin, New Zealand (1961)
- Johnson, Mr. W. 42 Redmond Street, Manning 6152 (1939)
- Johnston, Mr. D. A. Junior Farmers Council, 156 Hay Street, Subiaco 6008 (1956)
- Johnstone, Mr. D. 66 Riley Street, Tuart Hill 6060 (1956)
- Johnstone, Mr. M. H. WAPET, P.O. Box C1580, Perth 6001 (1949)
- Jones, Mr. L. T. Department of Agriculture, Jarrah Road, South Perth 6151 (1952)
- Jones, Mr. W. R. K. 49 MacLeod Road, Applecross 6153 (1951)
- Kay, Mr. J. G. Geology Department, University of Western Australia, Nedlands 6009 (1959)
- Keay, Dr. J. Kaymin Laboratories Pty. Ltd., Murray Road, Welshpool 6106 (1969)
- Kemp, Dr. E. M. Department of Geology, Florida State University, Tallahassee, Florida, U.S.A. (1969)
- Kendrick, Mr. G. W. Western Australian Museum, Beaufort Street, Perth 6000 (1965)
- Kenneally, Mr. K. F. Botany Department, University of Western Australia, Nedlands 6009 (1969)
- Kenny, Mr. R. P. Department of Zoology, University College of Townsville, Q. 4810 (1947)
- King, Mr. E. G. 67 Coode Street, South Perth 6151 (1949)
- Koch, Dr. L. E. Western Australian Museum, Beaufort Street, Perth 6000 (1958)
- Koop, Mr. W. J. 93 Sydenham Street, Doubleview 6011 (1971)
- Larkin, Mr. J. V. Department of Agriculture, Jarrah Road, South Perth 6151 (1933) (Associate member)
- Lewis, Mr. J. D. Geological Survey of Western Australia, Mineral House, 66 Adelaide Terrace, Perth 6000 (1969)
- Little, Mr. R. J. 493 Canning Highway, Melville 6156 (1932)
- Littlejohn, Dr. M. J. Zoology Department, University of Melbourne, Parkville, Vic. 3052 (1956)
- Logan, Dr. B. W. Geology Department, University of Western Australia, Nedlands 6009 (1958)
- Loneragan, Dr. J. F. Institute of Agriculture, University of Western Australia, Nedlands 6009 (1961)
- Loneragan, Mr. O. W. Institute of Forests Research, Todd Avenue, Como 6152 (1964)
- Loneragan, Mr. W. A. Botany Department, University of Western Australia, Nedlands 6009 (1963)
- Lord, Mr. J. H. Geological Survey of Western Australia, Mineral House, 66 Adelaide Terrace, Perth 6000 (1942)
- Lorimer, Mr. W. J. 3 Kemp Road, Mt. Pleasant 6153 (1952)
- Lowry, Mr. D. C. 23 Kalamatta Way, Gooseberry Hill 6076 (1964)
- Lowry, Mrs J. W. J. 23 Kalamatta Way, Gooseberry Hill 6076 (1964)
- Lukis, Miss M. F. F. 91 Hardy Street, Nedlands 6009 (1949) (Associate member)
- Main, Prof. A. R. Zoology Department, University of Western Australia, Nedlands 6009 (1951)
- Main, Dr. B. Y. Zoology Department, University of Western Australia, Nedlands 6009 (1952)
- Malcolm, Mr. C. V. Department of Agriculture, Jarrah Road, South Perth 6151 (1958)
- Marchant, Dr. N. G. Western Australian Herbarium, Department of Agriculture, Jarrah Road, South Perth 6151 (1963)
- Marsh, Mrs. L. M. 6 Conon Road, Applecross 6153 (1955)
- Marshall, Mr. G. E. 'Carradale', 522 Hawtin Road, Forrestfield 6058 (1936)
- Maslin, Mr. B. R. Western Australian Herbarium, Department of Agriculture, Jarrah Road, South Perth 6151 (1970)
- Masters, Mr. B. K. 3 Carrigg Crescent, Kelm-scott 6111 (1970)
- McArthur, Mr. W. M. C.S.I.R.O. Regional Laboratories, Underwood Avenue, Floreat Park 6014 (1951)
- McCall, Dr. G. J. H. 37 Marama Drive, Frankston, Vic. 3199 (1961)
- McComb, Dr. A. J. Botany Department, University of Western Australia, Nedlands 6009 (1963)
- McGann, G. J. 12 Robin Street, Mt. Lawley 6050 (1971)
- McKay, Mr. R. J. Western Australian Museum, Beaufort Street, Perth 6000 (1959)
- McKenna, Mr. L. N. 12 Goldsworthy Road, Claremont 6010 (1952)
- McKenzie, Mr. R. B. 275 Crawford Road, Inglewood 6052 (1956)
- McKenzie, Dr. K. G. c/o Flat 5, 159 Cotham Road, Kew, Vic. 3101 (1959)
- McMillan, Mr. R. P. 9 Terrace Road, Guildford 6055 (1956)
- McTavish, Dr. R. A. WAPET, P.O. Box C1580, Perth 6001 (1958)
- Meadly, Mr. G. R. W. Department of Agriculture, Jarrah Road, South Perth 6151 (1931)
- Mees, Dr. G. F. Rijkmuseum van Natuurlijke Historie, Leiden, Holland (1959)
- Merrifield, Mrs. E. M. 10 Bridge Street, South Guildford 6055 (1969)
- Merrilees, Dr. D. Western Australian Museum, Beaufort Street, Perth 6000 (1959)

- Miles, Dr. K. R. 11 Church Street, Mitcham, S.A. 5062 (1935)
- Miles, Mr. S. J. Flat 22, 27 St. Leonard's Street, Mosman Park 6012 (1967)
- Milesi, Mr. A. J. 20 Geographe Bay Road, Busselton 6280 (1956)
- Millington, Dr. A. J. Kimberley Research Station, Kununurra 6743 (1952)
- Milne, Mr. A. 138 Brompton Road, Wembley Downs 6019 (1970)
- Morgan, Mr. J. F. Department of Lands and Surveys, Cathedral Avenue, Perth 6000 (1962)
- Morgan, Mr. K. H. 3 Jennifer Way, Rossmoyne 6155 (1961)
- Mott, Mr. J. J. 1 Hartfield Way, Balga 6061 (1968)
- Moulds, Mr. M. S. 14 Chisholm Street, Greenwich, N.S.W. 2065 (1967)
- Muir, Mr. B. G. Zoology Department, University of Western Australia, Nedlands 6009 (1967)
- Mulcahy, Dr. M. J. C.S.I.R.O. Regional Laboratories, Underwood Avenue, Floreat Park 6014 (1955)
- Neumann, Mrs. A. Western Australian Museum, Beaufort Street, Perth 6000 (1961)
- Nicholls, Dr. A. G. 15 Torrington Place, Canterbury, Vic. 3126 (1940)
- Osman, Mr. A. H. c/o Blair Athol Coal Pty. Ltd., P.O. Box 159, Emerald, Q. 4720 (1962)
- Packer, Dr. W. C. Zoology Department, University of Western Australia, Nedlands 6009 (1961)
- Pande, Mr. H. D. Department of Mathematics, University of Western Australia, Nedlands 6009 (1968)
- Parker, Dr. C. A. Institute of Agriculture, University of Western Australia, Nedlands 6009 (1959)
- Paust, Miss S. 15 Hawkins Street, Mount Pleasant 6153 (1971)
- Pearce, Mr. R. H. 70 Davis Crescent, Kalamunda 6076 (1955)
- Pearman, Dr. G. C.S.I.R.O. Division of Meteorological Physics, Station Street, Aspendale, Vic. 3195 (1963)
- Peet, Mr. L. J. 4 Asten Road, City Beach 6015 (1965)
- Perret, Dr. J. 132 Rosalie Street, Shenton Park 6008 (1960)
- Perry, Mr. D. H. 26 Egham Road, Victoria Park 6100 (1959)
- Perry, Mrs. G. School of Biological Sciences, Macquarrie University, North Ryde, N.S.W. 2113 (1966)
- Phillips, Dr. B. F. C.S.I.R.O. Division of Fisheries and Oceanography, Waterman 6020 (1968)
- Pillow, Mr. R. P. J. Perth Technical College, St. George's Terrace, Perth 6000 (1948)
- Playford, Dr. G. Department of Geology, University of Queensland, St. Lucia, Q. 4067 (1958)
- Playford, Dr. P. E. 102 Thomas Street, Nedlands 6009 (1952)
- Podger, Mr. F. D. Plant Pathology Laboratory, University of Auckland, Auckland, New Zealand (1965)
- Poole, Mr. W. E. C.S.I.R.O. Division of Wildlife Research, P.O. Box 84, Lyneham, A.C.T. 2602 (1951)
- Porter, Mr. N. G. 5 St. Kilda Road, Rivervale 6103 (1970)
- Powell, Mrs. W. c/o P.O. Box 1383R, Brisbane, Q. 4001 (1946)
- Prider, Prof. R. T. Geology Department, University of Western Australia, Nedlands 6009 (1932)
- Prider, Mrs. R. T. 44 Hobbs Avenue, Dalkeith 6009 (1949) (Associate member)
- Pryce, Mr. M. W. 7 Latham Street, Alfred Cove 6154 (1955)
- Quilty, Dr. P. G. J. 421 The Strand, Dianella 6062 (1962)
- Quirk, Prof. J. P. Department of Soil Science and Plant Nutrition, University of Western Australia, Nedlands 6009 (1969)
- Redman, Miss M. E. 11 Elstree Avenue, Mount Lawley 6050 (1951)
- Ride, Dr. W. D. L. Western Australian Museum, Beaufort Street, Perth 6000 (1958)
- Ridpath, Mr. M. Union Road, Carmel, via Kalamunda 6076 (1968)
- Rimes, Mr. G. D. Department of Agriculture, Jarrah Road, South Perth 6151 (1956)
- Roberts, Mr. F. J. C.S.I.R.O. Regional Laboratories, Underwood Avenue, Floreat Park 6014 (1958)
- Robinson, Mr. F. N. Wootona Cottage, Bertram Street, Darlington 6070 (1968)
- Roe, Mrs. R. Box 4, Gingin 6503 (1969)
- Royce, Mr. R. D. Western Australian Herbarium, Department of Agriculture, Jarrah Road, South Perth 6151 (1938)
- Samuel, Dr. L. W. Government Chemical Laboratories, 64 Adelaide Terrace, Perth 6000 (1931)
- Sanders, Mr. C. C. Geological Survey of Western Australia, Mineral House, 66 Adelaide Terrace, Perth 6000 (1968)
- Seddon, Dr. G. S. 49 Victoria Avenue, Claremont 6010 (1962)
- Sedgman, Mr. H. 79 Beatrice Road, Dalkeith 6009 (1950)
- Serventy, Dr. D. L. C.S.I.R.O. Division of Wildlife Research, Clayton Road, Helena Valley 6070 (1924)
- Serventy, Mr. V. N. 8 Reiby Road, Hunters Hill, N.S.W. 2110 (1947)
- Shaw, Dr. S. E. School of Earth Sciences, Macquarie University, Eastwood, N.S.W. 2122 (1959)
- Shearer, Mr. B. L. c/o 1A Bridges Road, Melville 6156 (1968)
- Shearer, Mrs. J. 89 Thomas Street, Nedlands 6009 (1949) (Associate member)
- Shugg, Mr. H. B. Department of Fisheries and Fauna, 108 Adelaide Terrace, Perth 6000 (1959)
- Smith, Dr. E. B. J. 4 Kinnane Place, Attadale 6156 (1969)
- Smith, Dr. F. G. 30 Vincent Street, Nedlands 6009 (1963)



- Smith, Mr. G. G. Botany Department, University of Western Australia, Nedlands 6009 (1951)
- Smith, Dr. R. c/o Mr. A. G. Turton, C.S.I.R.O. Regional Laboratories, Underwood Avenue, Floreat Park 6014 (1949)
- Snowball, Mr. G. J. 34 Millwood Avenue, Chatswood, N.S.W. 2067 (1940)
- Sofoulis, Mr. J. Westralian Sands, 1122 Hay Street, West Perth (1970)
- Spence, Mr. T. 151 Mill Point Road, South Perth 6151 (1967)
- Springett, Dr. B. P. C.S.I.R.O. Division of Entomology, Private Bag, P.O. Wembley 6014 (1969)
- Springett, Dr. J. A. Institute of Forests Research, Todd Avenue, Como 6152 (1969)
- Stephenson, Mr. N. C. Geology Department, University of New England, Armidale, N.S.W. 2315 (1969)
- Stewart, Mr. D. W. R. Forests Department, R. & I. Bank Building, Barrack Street, Perth 6000 (1956)
- Storr, Dr. G. M. Western Australian Museum, Beaufort Street, Perth 6000 (1955)
- Summers, Mr. K. W. A. 20 Kintail Road, Applecross 6153 (1948)
- Taylor, Dr. J. C. 26 Neville Road, Dalkeith 6009 (1970)
- Teichert, Dr. C. Paleontological Institute, University of Kansas, Lawrence, Kansas, U.S.A. (1938)
- Terrill, Mr. S. E. 4 Prosser Street, Bunbury 6230 (1928)
- Thomas, Mr. R. P. 96 Killarney Street, Kalgoorlie 6430 (1969)
- Thomas, Mr. B. P. Department of Mines, P.O. Box 38, Rundle Street, Adelaide, S.A. 5001 (1949)
- Thomson, Dr. J. M. Zoology Department, University of Queensland, St. Lucia, Q. 4067 (1962)
- Thornton, Dr. J. W. 28 Osborne Road, East Fremantle 6158 (1964)
- Tiller, Mr. K. C. C. 109 Chelmsford Road, Mount Lawley 6050 (1935)
- Tomlinson, Mr. A. R. Department of Agriculture, Jarrah Road, South Perth 6151 (1956)
- Trendall, Dr. A. F. Geological Survey of Western Australia, Mineral House, 66 St. George's Terrace, Perth 6000 (1963)
- Turner, Mr. G. J. 9 Shoalwater Road, Safety Bay 6169 (1967)
- Utting, Mr. E. P. 10 Keane Street, Cottesloe 6011 (1963)
- Wallace, Mr. M. McA. H. C.S.I.R.O. Regional Laboratories, Underwood Avenue, Floreat Park 6014 (1956)
- Wallace, Mr. W. R. Forests Department, R. & I. Bank Building, Barrack Street, Perth 6000 (1957)
- Waring, Prof. H. Zoology Department, University of Western Australia, Nedlands 6009 (1948)
- Waterhouse, Mr. W. K. Agricultural Wing, Narrogin Agricultural Senior High School, Narrogin 6312 (1968)
- Webb, Prof. M. J. Geography Department, University of Western Australia, Nedlands 6009 (1968)
- Whitfield, Mr. G. B. 339 Carrington Street, Hamilton Hill 6163 (1970)
- Whitley, Mr. G. P. The Australian Museum, P.O. Box A285, Sydney South, N.S.W. 2001 (1942)
- Williams, D. A. 6 Rheola Street, West Perth 6005 (1971)
- Willmott, Mr. S. P. WAPET, P.O. Box C1580, Perth 6000 (1962)
- Wilson, Prof. A. F. Geology Department, University of Queensland, St. Lucia, Q. 4067 (1949)
- Wilson, Mr. P. G. Western Australian Herbarium, Department of Agriculture, Jarrah Road, South Perth 6151 (1965)
- Woodall, Mr. R. Western Mining Corporation, P.O. Box 71, Kalgoorlie 6430 (1955)
- Wright, Mr. E. A. M. 40 Beatrice Road, Dalkeith 6009 (1956)

#### Notes:

Dates of election to Membership and, where appropriate, to Honorary Membership, are given in brackets.

Countries outside Australia are given in full. Australian Capital Territory, New South Wales, Queensland, South Australia, Tasmania and Victoria are abbreviated to A.C.T., N.S.W., Q., S.A., Tas. and Vic. respectively. All other addresses are in Western Australia.